

IN THE CLAIM

Please cancel Claims 1 to 14, without prejudice or disclaimer of the subject matter thereof, and add new claim 15. The added new claim 15 is based on the original claims 1-7 and the features in Fig. 3 of the present invention (that is, the combination of the claims 8 to 14). Thereby, it is assured that the new claims are based on the original claim and specification and thus no new matter is added. The relation of the new claims with respect to the original claims are shown in the following REMARK, Examiners can read the claims more easily from the REMARK.

LIST OF CLAIMS:

Claim 1-14 (Cancelled)

Claim 15. (New) An engine with an auxiliary airflow booster, comprising:

a cylinder having a combustion chamber; a piston being installed in the combustion chamber;

an air inlet head having an air inlet gate and being formed at an upper inlet side of the piston; the air inlet head being assembled with an air inlet tube for inputting fresh air; the air inlet gate being assembled with an air inlet, a spring, and a camshaft;

an exhausting head having an exhausting gate and being formed at an upper outlet side of the piston; an exhausting tube being assembled to the exhausting head for exhausting waste gas; the exhausting gate being assembled with an air output gate, a spring and a camshaft, wherein input air is mixed with fuel in the combustion chamber and then burns, the air inlet gate is opened, and the air outlet gate is closed; when waste gas is exhausted, the air inlet gate is closed and the exhausting gate is opened;

an exhausting tube connected to the exhausting head; and

an auxiliary airflow booster installed to the exhausting tube at an exhausting gate of the exhausting head; the auxiliary airflow booster being a hollow body; an inner wall of the auxiliary airflow booster being formed with a narrowing portion which comprises two opposite tapered surfaces so as to have a front via hole and a rear via hole; the front via hole having a front tapered portion and the rear via hole having a rear tapered portion; an inner diameter of the front via hole being smaller than the inner diameter of the rear via hole; namely, the narrow portions of the front tapered portion and rear tapered portion being connected; since the inner diameter of the rear via hole being larger than the inner diameter of the front via hole, the rear via hole expanding the diameter of the body; by above structure, the exhausting speed of waste gas is increased so that more fresh air is sucked into the cylinder; two sides of the cross sections of the front tapered portion and rear tapered portion passing through central axes of the front tapered portion and rear tapered portion 230 are formed as straight lines;

wherein the length of the front tapered portion of the front via hole is shorter than that of the rear tapered portion of the rear via hole;

wherein the material of the body is selected from one of metals and ceramics;

wherein an auxiliary cover covers the periphery of the body;

wherein a locking sheet is formed at a front end of the body for locking the exhausting head at the exhausting gate of the cylinder, and a rear end thereof is installed with a connecting section for engaging the exhausting tube;

wherein an inner wall of the exhausting gate of the exhausting head of a cylinder is formed with a narrowing portion which comprises two opposite tapered surfaces so as to have a front via hole and a rear via hole; the front via hole has a front tapered portion and the rear via hole has a rear tapered portion; and

wherein at least one body is installed in the exhausting tube.